INSTALLER: THESE INSTRUCTIONS MUST BE CONVEYED TO AND REMAIN WITH THE HOMEOWNER.

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CSA 2.33, ANSI Z21.88 FOR VENTED GAS FIREPLACE HEATERS



DIRECT VENT MILLIVOLT SYSTEM

INSTALLATION AND OPERATION INSTRUCTIONS FOR

NATURAL GAS MODEL GD36NTR & BGD36NTR
PROPANE GAS MODEL GD36PTR & BGD36PTR

CERTIFIED FOR CANADA AND UNITED STATES USING ANSI / CSA METHODS

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your build ing.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.









TABLE of CONTENTS

INTRODUCTION 23-24 **FINISHING PG 2-5**

Warranty

General Instructions General Information Care of Glass & Plated Parts

Specifications

5-15 **VENTING**

Venting Lengths Air Terminal Locations Typical Vent Installations Special Vent Installations Venting Application Flow Chart Venting Specifications

Pre-Installation Preparation

16-22 **INSTALLATION**

Wall and Ceiling Protection Using Flexible Vent Components Fireplace Vent Connection Using Rigid Vent Components Restricting Vertical Vents - GD36 only Gas Installation Mobile Home Installation

Framing

Mantle Clearances Nailing Tab Installation Door Removal & Installation Louvre Removal & Installation

Log Placement Charcoal Embers Vermiculite Glowing Embers Logo Placement

25 **OPTIONAL BLOWER INSTALLATION** 26 **OPTIONAL FAN INSTALLATION** OPTIONAL THERMOSTATIC SENSOR

27-28 **OPERATION / MAINTENANCE**

> Operating Instructions Maintenance

28 **ADJUSTMENTS**

Pilot Burner Adjustment Venturi Adjustment

29-30 **REPLACEMENTS**

Ordering Replacement Parts

Replacement Parts Vent Kits

Terminal Kits Accessories

31-32 TROUBLE SHOOTING GUIDE

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

WARNING

- Do not burn wood or other materials in this fireplace.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures and should be alerted to the hazards of high surface temperatures. stay away to avoid burns or clothing ignition. Supervise young children when they are in the same room the fireplace.
- Due to high temperatures, the fireplace should be located out of traffic and away from furniture and deal
- Clothing or other flammable material should not be placed on or near the fireplace.
- Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.
- It is imperative that the control compartments, burners and circulating blower and its passageway in fireplace and venting system are kept clean. The fireplace and its venting system should be inspec before use and at least annually by a qualified service person. More frequent cleaning may be required to excessive lint from carpeting, bedding material, etc. The fireplace area must be kept clear and free fi combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this fireplace be modified.
- This fireplace must not be connected to a chimney flue pipe serving a separate solid fuel burning appliar
- Do not use this fireplace if any part has been under water. Immediately call a qualified service technidia inspect the fireplace and to replace any part of the control system and any gas control which has be under water.
- Do not operate the fireplace with the glass door removed, cracked or broken. Replacement of the should be done by a licensed or qualified service person. Use only with a glass door certified wid fireplace.
- Do not strike or slam shut the fireplace glass door.
- This fireplace uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple. supplied by Wolf Steel Ltd.

NAPOLEON gas fireplaces are manufactured under the strict Standard of the world recognized

ISO 9001: 2000 Quality Assurance Certificate.

NAPOLEON products are designed with superior components and materials, assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete fireplace is again thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from NAPOLEON.

NAPOLEON GAS FIREPLACE PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new NAPOLEON gas fireplace are warranted against defects for as long as you own the fireplace. This covers: combustion chamber, heat exchanger, stainless steel burner, phazerTM logs and embers, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enamelled components and aluminum extrusion trims.

Electrical (110V and millivolt) components and wearable parts such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and NAPOLEON will provide replacement parts free of charge during the first year of the limited warranty.

Labour related to warranty repair is covered free of charge during the first year. Repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of NAPOLEON are based on a predetermined rate schedule and any repair work must be done through an authorized NAPOLEON dealer.

CONDITIONS AND LIMITATIONS

NAPOLEON warrants its products against manufacturing defects to the original purchaser only -- i.e., the individual or legal entity (registered customer) whose name appears on the warranty registration card filed with NAPOLEON -- provided that the purchase was made through an authorized NAPOLEON dealer and is subject to the following conditions and limitations:

This factory warranty is nontransferable and may not be extended whatsoever by any of our representatives.

The gas fireplace must be installed by a licenced, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes.

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect and parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discolouring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of PHAZER™ logs and embers, nor any venting components used in the installation of the fireplace.

NAPOLEON warrants its stainless steel burners against defects in workmanship and material for life, subject to the following conditions: During the first 10 years NAPOLEON will replace or repair the defective parts at our option free of charge. From 10 years to life, NAPOLEON will provide replacement burners at 50% of the current retail price.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to this President's Limited Lifetime Warranty, NAPOLEON may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

After the first year, NAPOLEON will not be responsible for installation, labour or any other costs or expenses related to the reinstallation of a warranted part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in this President's Limited Lifetime Warranty, NAPOLEON'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of NAPOLEON with respect to the NAPOLEON gas fireplace and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLEON neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. NAPOLEON will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

Any damages to fireplace, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of NAPOLEON.

The bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from your authorized dealer. The warranty registration card must be returned within fourteen days to register the warranty.

NAPOLEON reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim.

GENERAL INSTRUCTIONS

THIS GAS FIREPLACE SHOULD BE INSTALLED AND SERV-ICED BY A QUALIFIED INSTALLER to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area, for example: in Massachusetts State:

- The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert or gas log.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.
- WARNING: This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.

In absence of local codes, install the **GD36 and BGD36** to the current National Fuel Gas Code, ANSI Z223.1, or the current CAN/CGA B149, Installation Codes. Mobile home installation must conform with local codes or in the absence of local codes, install to the current standard for gas equipped mobile housing CAN/CSA ZA240 MH Series in Canada or the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or the Fire Safety Criteria for Manufactured Home Installations, Sites and Communities Standard ANSI/NFPA 501A in the United States

The fireplace and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The fireplace must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

When the fireplace is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth.

If the optional fan or blower is installed, the junction box must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.

GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS FIREPLACE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY! Maximum input is 26,000 BTU/hr for natural gas and propane for the GD36. Maximum input for the BGD36 is 17,000 BTU/h for natural gas and propane. When the fireplace is installed at elevations above 4,500ft, and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000ft.

GD36

Maximum output for natural gas is 22,360 BTU/hr at an efficiency of 86% with the fan on, and 22,880 BTU/hr for propane at an efficiency of 88% with the fan on. The A.F.U.E. (annual fuel utilization efficiency) rating is 64% for natural gas and 65% for propane.

BGD36

Maximum output for natural gas and propane is 10,900 BTU/ hr at an efficiency of 64% with the fan on. The A.F.U.E. (annual fuel utilization efficiency) rating is 53% for natural gas and propane.

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11 inches water column for propane. Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane. Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane. This fireplace is approved for bathroom, bedroom and bedsitting room installations and is suitable for mobile home installation.

No external electricity (110 volts or 24 volts) is required for the gas system operation.

Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected.

CARE OF GLASS, AND PLATED PARTS

Do not use abrasive cleaners to clean plated parts. Buff lightly with a clean dry cloth. The GD36 is factory equipped with ceramic glass. The BGD36 is factory equipped with tempered glass. The glass thickness is 3/16" for both models. Use only replacement glass available from your Napoleon dealer. DO NOT SUBSTITUTE MATERIALS. Clean the glass after the first 10 hours of operation with a recommended gas fireplace glass cleaner. Thereafter clean as required. DO NOT CLEAN GLASS WHEN HOT! If the glass is not kept clean permanent discolouration and / or blemishes may result.

<u>Use only accessories designed for and listed with</u> <u>your specific fireplace.</u>

Provide adequate ventilation air. Provide adequate accessibility clearance for servicing and operating the fireplace. Never obstruct the front opening of the fireplace.

For safe and proper operation of the fireplace follow the venting instruction exactly.

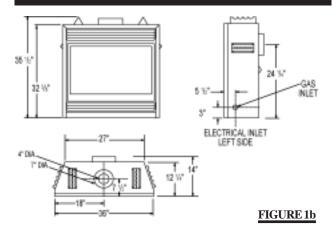
Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning. Provide a means for visually checking the vent connection to the fireplace after the fireplace is installed. Vent lengths that pass through unheated spaces (attics, garages, crawl spaces) should be insulated with the insulation wrapped in a protective sleeve to minimize condensation.

Objects placed in front of the fireplace must be kept a minimum of 48" away from the front face of the unit.

GD36 SPECIFICATIONS

SS V' SAS INLET FINAL TY DAY TO DAY

BGD36 SPECIFICATIONS



VENTING

FIGURE 1a

MODELS GD36 AND BGD36 MAY BE VENTED EITHER AS A TOP VENT OR A REAR VENT.
REFER TO THE SECTION APPLICABLE TO YOUR INSTALLATION.

VENTING LENGTHS

Use only Wolf Steel or Simpson Dura-Vent Model DV-GS venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, follow the installation procedure provided with the venting components.

When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: WALL TERMINAL KIT GD222, or 1/12 TO 7/12 PITCH ROOF TERMINAL KIT GD110, 8/12 TO 12/12 ROOF TERMINAL KIT GD111, FLAT ROOF TERMINAL KIT GD112 or PERISCOPE KIT GD201 (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot vent kit GD220 or the 10 foot vent kit GD330.

Wolf Steel rigid and flexible venting systems must not be combined.

Wolf Steel and Simpson Dura-Vent venting systems must not be combined.

These vent kits allow for either horizontal or vertical venting of the fireplace. **FIGURES 3 & 5.** The maximum allowable horizontal run is 20 feet. The maximum allowable vertical vent length is 40 feet. The maximum number of 4" vent connections is two horizontally or three vertically (excluding the fireplace and the air terminal connections) when using aluminum flexible venting.

For optimum flame appearance and fireplace performance, keep the vent length and number of elbows to a minimum.

The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

Purge all gas lines with the glass door of the fireplace open. Assure that a continuous gas flow is at the burner before closing the door.

Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition.

Six (6") inches is the minimum bend radius allowed for the 7" diameter flexible liner.

For optimum performance it is recommended that all horizontal runs have a 1 inch rise per foot when using Napoleon flexible vent components.

A terminal shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings. Local codes or regulations may require different clearances. Do not allow the inside liner to bunch up on horizontal or vertical runs and elbows. Keep it pulled tight. A 1¼" air gap all around between the inner liner and outer liner is required for safe operation. Use a firestop when penetrating interior walls, floor or ceiling.

Minimum clearance to combustible construction from fireplace and vent surfaces:

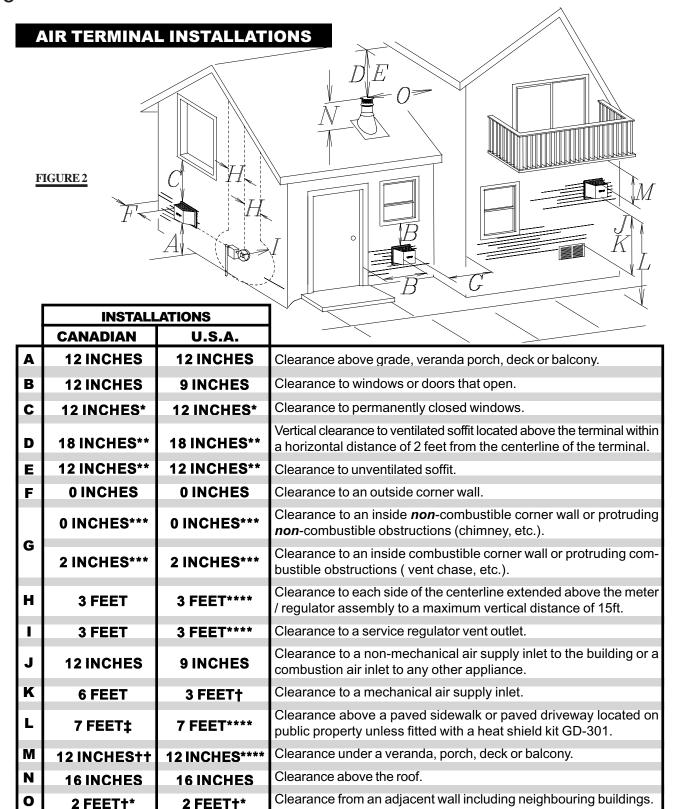
sides, back, bottom and top of the unit recessed depth 14 inches top, sides and bottom of the vent pipe* 1 inch top of the vent pipe - rear vent only* 2 inches

* **REAR VENT** - A clearance to combustibles of 1" at the bottom of the vent and 2" at the top must be maintained during the first 12" of venting when penetrating combustible walls. The firestop spacer (W615-044) supplied with the unit should be used to maintain this clearance. Thereafter a 1" clearance to combustibles may be maintained using firestop spacer (W500-0096).

TOP VENT - Only a clearance to combustibles of 1" all around the vent pipe is required.

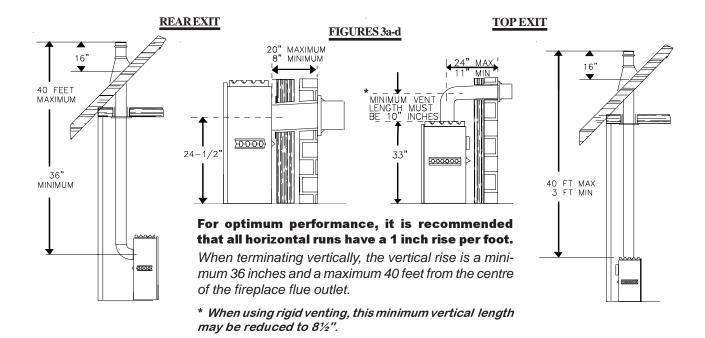
REQUIRED RISE ON HORIZONTAL VENTING		BGD36	GD36
REAR VENT	RIGID VENTING	0"/FT	1"/FT*
	FLEXIBLE VENTING	0"/FT	1"/FT*
TOP VENT	RIGID VENTING	0"/FT	0"/FT
	FLEXIBLE VENTING	0"/FT	0"/FT
CORNER	RIGID VENTING	0"	6"
	FLEXIBLE VENTING	6"	6"

^{*} When a vertical rise is used as part of the venting configuration, a 0" rise per foot is acceptable.



- Recommended to prevent condensation on windows and thermal breakage
- ** It is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.
- *** The periscope GD-201 requires a minimum 18 inches clearance from an inside corner.
- **** This is a recommended distance. For additional requirements check local codes.
- † Three feet above if within 10 feet horizontally.
- A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single dwellings and serves both dwellings.
- †† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.
- †* Recommenced to prevent recirculation of exhaust products. For additional requirements check local code

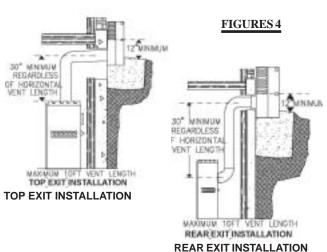
TYPICAL VENT INSTALLATIONS



SPECIAL VENT INSTALLATIONS

PERISCOPE TERMINATION

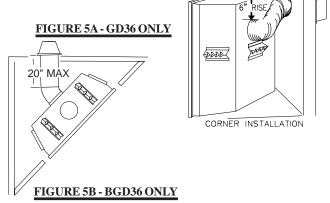
Use the GD201 periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum of 12 inches above grade. The maximum allowable vent length depends on the model of fireplace, as illustrated.

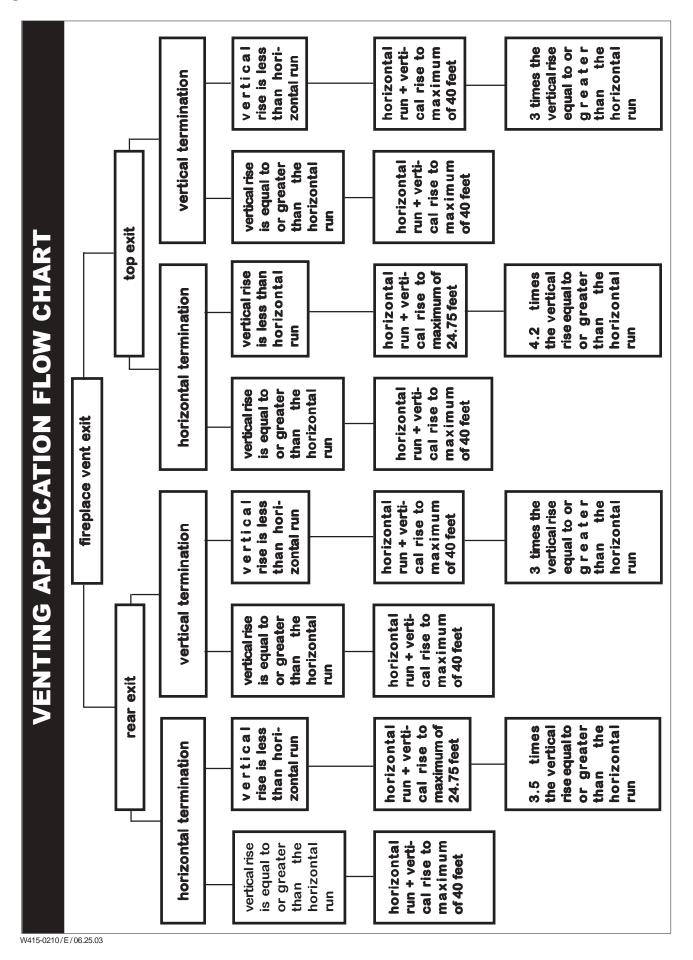


CORNER TERMINATION

MODELS GD36: The maximum vent length for a corner installation is 24 inches, where only 6 inches of vertical rise is used. All corner installations require a minimum 6 inch rise. See FIGURE 5A.

MODELS BGD36: The maximum vent length for a corner installation is 20 inches of horizontal run, in addition to the 45° offset. In this case zero rise is acceptable when using rigid. Flexible venting must maintain a 6" rise. See FIGURE 5B.





DEFINITIONS

for the following symbols used in the venting calculations and examples are:

- > greater than
- > equal to or greater than
- < less than
- equal to or less than
- $\mathbf{H_T}$ total of both horizontal vent lengths $(\mathbf{H_R})$ and offsets $(\mathbf{H_O})$ in feet
- H. combined horizontal vent lengths in feet
- **H**_o offset factor: .03(total degrees of offset 90°*) in feet
- $\boldsymbol{V_{\scriptscriptstyle T}}$ combined vertical vent lengths in feet

	<u>feet</u>	<u>inches</u>
1°	0.03	0.5
15°	0.45	6.0
30°	0.9	11.0
45°	1.35	16.0
90°*	2.7	32.0

* the first 90° offset has a zero value and is shown in the formula as **-90**°

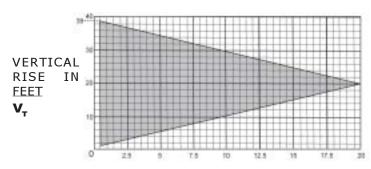
TOP EXIT / HORIZONTAL TERMINATION

when $(H_{-}) \leq (V_{-})$

Simple venting configuration (only one 90° elbow)

FIGURE 6

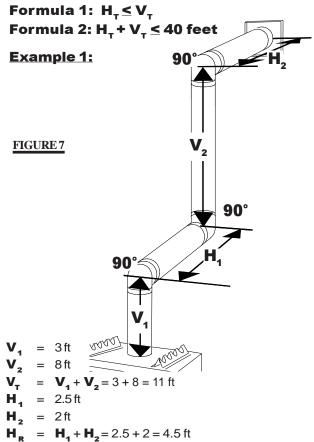
See graph to determine the required vertical rise $\mathbf{V_T}$ for the required horizontal run $\mathbf{H_T}$



HORIZONTAL VENT RUN PLUS OFFSET IN FEET H.

The shaded area within the lines represents acceptable values for \mathbf{H}_{τ} and \mathbf{V}_{τ} .

For vent configurations requiring more than one 90° elbow, the following formulas apply:



 $\mathbf{H_T} + \mathbf{V_T} = 9.9 + 11 = 20.9 \text{ ft}$

Formula 1: $\mathbf{H_T} \leq \mathbf{V_T}$ 9.9 \le 11

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40$ feet

= $H_R + H_o = 4.5 + 5.4 = 9.9 \text{ ft}$

 $20.9 \le 40$

Since both formulas are met, this vent configuration is acceptable.

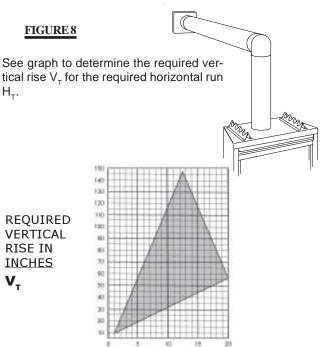
 $= .03(three 90^{\circ} elbows - 90^{\circ}) = .03(270^{\circ} - 90^{\circ}) = 5.4 ft$

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TOP EXIT / HORIZONTAL TERMINATION

when $(H_T) > (V_T)$

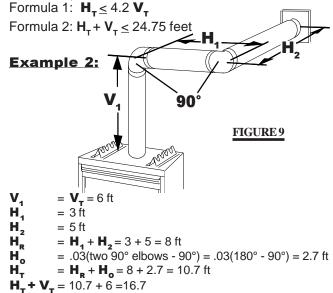
Simple venting configuration (only one 90° elbow)



HORIZONTAL VENT RUN PLUS OFFSET IN FEET H,

The shaded area within the lines represents acceptable values for H_{τ} and V_{τ} .

For vent configurations requiring more than one 90° elbow the following formulas apply:



Formula 1: **H**₊ ≤ **4.2 V**₊

4.2 $V_{\tau} = 4.2 \times 6 = 25.2 \text{ ft}$

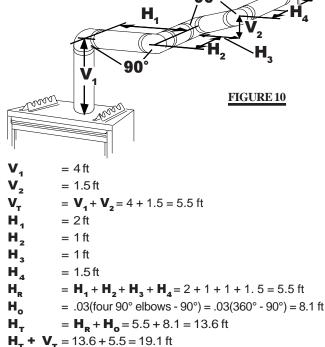
 $10.7 \le 25.2$

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 24.75$ feet

 $16.7 \le 24.75$

Since both formulas are met, this vent configuration is acceptable.

Example 3:



Formula 1: $\mathbf{H}_{\mathsf{T}} \leq 4.2 \, \mathsf{V}_{\mathsf{T}}$ 4.2 $\mathsf{V}_{\mathsf{T}} = 4.2 \, \mathsf{x} \, 5.5 = 23.1 \, \mathsf{ft}$

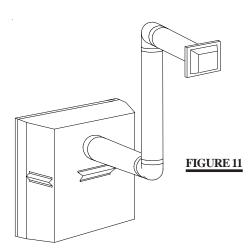
 $13.6 \le 23.1$

Formula 2: $H_T + V_T \le 24.75$ feet 19.1 \le 24.75

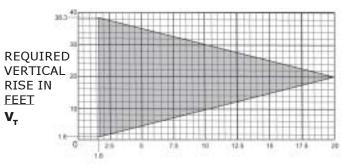
REAR EXIT / HORIZONTAL TERMINATION

when $(H_T) \leq (V_T)$

Simple venting configuration (only two 90° elbows)



See graph to determine the required vertical rise $\mathbf{V_T}$ for the required horizontal run $\mathbf{H_T}$



HORIZONTAL VENT RUN PLUS OFFSETS IN FEET H.

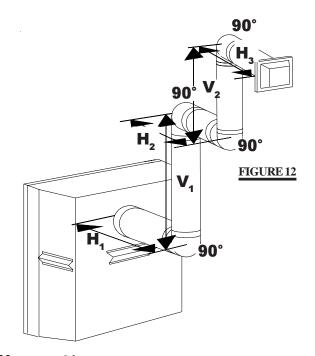
The shaded area within the lines represents acceptable values for H_{τ} and V_{τ} .

For vent configurations requiring more than two 90° elbows the following formulas apply:

Formula 1: $\mathbf{H}_{\mathbf{T}} \leq \mathbf{V}_{\mathbf{T}}$

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40$ feet

Example 4:



$$\begin{array}{lll} \textbf{V_1} & = 9 \text{ ft} \\ \textbf{V_2} & = 6 \text{ ft} \\ \textbf{V_T} & = \textbf{V_1} + \textbf{V_2} = 9 + 6 = 15 \text{ ft} \\ \textbf{H_1} & = 3 \text{ ft} \\ \textbf{H_2} & = 2 \text{ ft} \\ \textbf{H_3} & = 1.5 \text{ ft} \\ \textbf{H_R} & = \textbf{H_1} + \textbf{H_2} + \textbf{H_3} = 3 + 2 + 1.5 = 6.5 \text{ ft} \\ \textbf{H_0} & = .03 (\text{four } 90^\circ \text{ elbows } - 90^\circ) \\ & = .03 (90 + 90 + 90 + 90 - 90) = 8.1 \text{ ft} \\ \textbf{H_T} & = \textbf{H_R} + \textbf{H_0} = 6.5 + 8.1 = 14.6 \text{ ft} \\ \end{array}$$

 $\mathbf{H_T} + \mathbf{V_T} = 14.6 + 15 = 29.6 \,\text{ft}$ Formula 1: $\mathbf{H_T} \leq \mathbf{V_T}$

 $\mathbf{H_{T}} \leq \mathbf{V_{T}}$ $14.6 \leq 15$

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40 \text{ feet}$

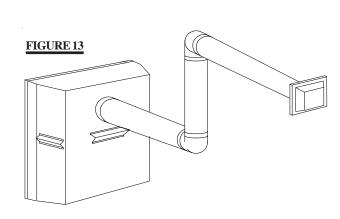
29.6 < 40

REAR EXIT / HORIZONTAL TERMINATION

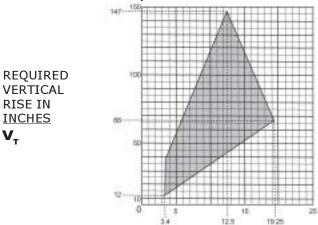
when $(H_T) > (V_T)$

Example 5:

Simple venting configuration (only two 90° elbows)



See graph to determine the required vertical rise $\mathbf{V_T}$ for the required horizontal run $\mathbf{H_T}$

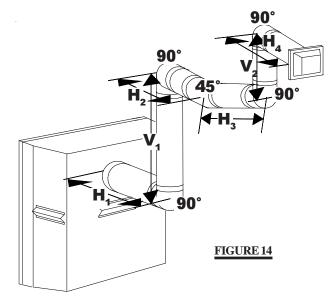


HORIZONTAL VENT RUN PLUS OFFSETS IN FEET $\mathbf{H_{\tau}}$ The shaded area within the lines represents acceptable values for H_{τ} and V_{τ} .

For vent configurations requiring more than two 90° elbows the following formulas apply:

Formula 1: $H_T \leq 3.5V_T$

Formula 2: $H_{\tau} + V_{\tau} \leq 24.75$ feet

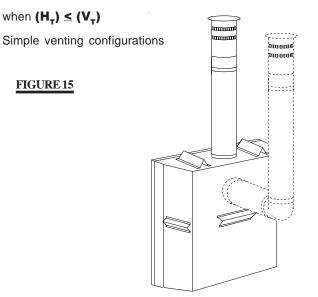


$$\begin{array}{lll} \textbf{V_1} & = 4\,\mathrm{ft} \\ \textbf{V_2} & = 1.5\,\mathrm{ft} \\ \\ \textbf{V_T} & = \textbf{V_1} + \textbf{V_2} = 4 + 1.5 = 5.5\,\mathrm{ft} \\ \textbf{H_1} & = 2\,\mathrm{ft} \\ \textbf{H_2} & = 1\,\mathrm{ft} \\ \textbf{H_3} & = 1\,\mathrm{ft} \\ \textbf{H_4} & = 1.5\,\mathrm{ft} \\ \textbf{H_R} & = \textbf{H_1} + \textbf{H_2} + \textbf{H_3} + \textbf{H_4} = 2 + 1 + 1 + 1.5 = 5.5\,\mathrm{ft} \\ \textbf{H_0} & = .03(\mathrm{four}\;90^\circ\;\mathrm{elbows} + \mathrm{one}\;45^\circ\;\mathrm{elbow} - 90^\circ) \\ & = .03(90 + 90 + 90 + 90 + 45 - 90) = 9.45\,\mathrm{ft} \\ \textbf{H_T} & = \textbf{H_R} + \textbf{H_0} = 5.5 + 9.45 = 14.95\,\mathrm{ft} \\ \textbf{H_T} & = 14.95 + 5.5 = 20.45\,\mathrm{ft} \\ \end{array}$$

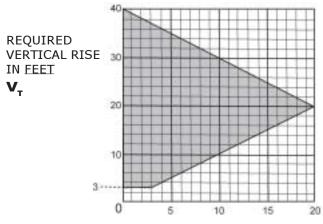
Formula 1: $\mathbf{H_T} \le \mathbf{3.5V_T}$ $\mathbf{3.5V_T} = 3.5 \times 5.5 = 19.25 \text{ ft}$ $14.95 \le 19.25$

Formula 2: $\mathbf{H_T} + \mathbf{V_T} \le \mathbf{24.75}$ feet $20.45 \le 24.75$

TOP OR REAR EXIT VERTICAL TERMINATION



See graph to determine the required vertical rise $\mathbf{V_T}$ for the required horizontal run $\mathbf{H_T}$.



HORIZONTAL VENT RUN PLUS OFFSET IN <u>FEET</u> \mathbf{H}_{τ} The shaded area within the lines represents acceptable values for H_{τ} and V_{τ} .

For vent configurations requiring more than zero 90° elbow (top exit) or one 90° elbow (rear exit), the following formulas apply:

Formula 1: H_T≤ V_T

Formula 2: $H_T + V_T \le 40$ feet

$$\begin{array}{lll} \textbf{V_1} & = 5 \text{ ft} \\ \textbf{V_2} & = 10 \text{ ft} \\ \textbf{V_T} & = \textbf{V_1} + \textbf{V_2} = 5 + 10 = 15 \text{ ft} \\ \textbf{H_1} & = 3 \text{ ft} \\ \textbf{H_2} & = 2.5 \text{ ft} \\ \textbf{H_R} & = \textbf{H_1} + \textbf{H_2} = 3 + 2.5 = 5.5 \text{ ft} \\ \textbf{H_0} & = .03 (\text{three } 90^\circ \text{ elbows } - 90^\circ) \\ & = .03 (90 + 90 + 90 - 90) = 5.4 \text{ ft} \\ \textbf{H_T} & = \textbf{H_R} + \textbf{H_0} = 5.5 + 5.4 = 10.9 \text{ ft} \\ \textbf{H_T} + \textbf{V_T} & = 10.9 + 15 = 25.9 \text{ ft} \end{array}$$

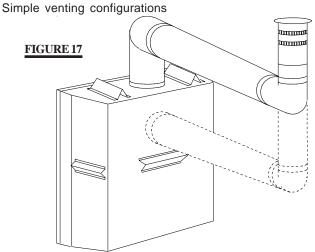
Formula 1: $\mathbf{H_T} \leq \mathbf{V_T}$ $10.9 \leq 15$

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40 \text{ feet}$

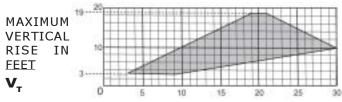
25.9 ≤ 40

TOP OR REAR EXIT VERTICAL TERMINATION

when $(H_T) > (V_T)$



See graph to determine the required vertical rise $\mathbf{V_T}$ for the required horizontal run $\mathbf{H_T}$.



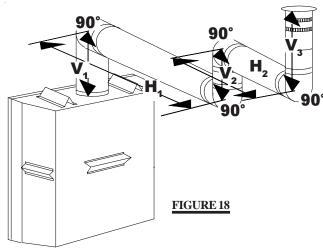
HORIZONTAL VENT RUN PLUS OFFSET IN <u>FEET</u> \mathbf{H}_{τ} The shaded area within the lines represents acceptable values for \mathbf{H}_{τ} and \mathbf{V}_{τ} .

For vent configurations requiring more than two 90° elbow (top exit) or one 90° elbow (rear exit), the following formulas apply:

Formula 1: H_T≤3V_T

Formula 2: $H_{\tau} + V_{\tau} \le 40$ feet

Example 7:



$$\begin{array}{lll} \textbf{V_1} & = 2 \, \text{ft} \\ \textbf{V_2} & = 1 \, \text{ft} \\ \textbf{V_3} & = 1.5 \, \text{ft} \\ \textbf{V_T} & = \textbf{V_1} + \textbf{V_2} + \textbf{V_3} = 2 + 1 + 1.5 = 4.5 \, \text{ft} \\ \textbf{H_1} & = 6 \, \text{ft} \\ \textbf{H_2} & = 2 \, \text{ft} \\ \textbf{H_R} & = \textbf{H_1} + \textbf{H_2} = 6 + 2 = 8 \, \text{ft} \\ \textbf{H_0} & = .03 (\text{four } 90^\circ \, \text{elbows - } 90^\circ) \\ & = .03 (\text{four } 90^\circ \, \text{elbows - } 90^\circ) \\ & = .03 (90 + 90 + 90 + 90 - 90) = 8.1 \, \text{ft} \\ \textbf{H_T} & = \textbf{H_R} + \textbf{H_0} = 8 + 8.1 = 16.1 \, \text{ft} \\ \textbf{H_T} + \textbf{V_T} = 16.1 + 4.5 = 20.6 \, \text{ft} \\ \textbf{Formula 1:} & \textbf{H_T} \leq \textbf{3} \textbf{V_T} \\ & \textbf{3} \textbf{V_T} & = 3 \times 4.5 = 13.5 \, \text{ft} \\ \end{array}$$

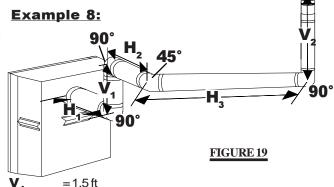
16.1 > 13.5Since this formula is not met, this vent configuration is

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40 \text{ feet}$

unacceptable.

 $20.6 \le 40$

Since only formula 2 is met, this vent configuration is unacceptable and a new fireplace location or vent configuration will need to be established to satisfy both formulas.



$$\begin{array}{lll} \textbf{V_2} & = 5\,\mathrm{ft} \\ \textbf{V_T} & = \textbf{V_1} + \textbf{V_2} = 1.5 + 5 = 6.5\,\mathrm{ft} \\ \textbf{H_1} & = 1\,\mathrm{ft} \\ \textbf{H_2} & = 1\,\mathrm{ft} \\ \textbf{H_3} & = 10.75\,\mathrm{ft} \\ \textbf{H_R} & = \textbf{H_1} + \textbf{H_2} + \textbf{H_3} = 1 + 1 + 10.75 = 12.75\,\mathrm{ft} \\ \textbf{H_0} & = .03(\mathrm{three}\ 90^\circ\ \mathrm{elbows} + \mathrm{one}\ 45^\circ\ \mathrm{elbow}\ - 90^\circ) \\ & = .03(90 + 90 + 90 + 45 - 90) = 6.75\,\mathrm{ft} \\ \textbf{H_T} & = \textbf{H_R} + \textbf{H_0} = 12.75 + 6.75 = 19.5\,\mathrm{ft} \\ \textbf{H_T} + \textbf{V_T} & = 19.5 + 6.5 = 26\,\mathrm{ft} \\ \end{array}$$

Formula 1: $\mathbf{H_{T}} \leq 3\mathbf{V_{T}}$ $3\mathbf{V_{T}} = 3 \times 6.5 = 19.5 \text{ ft}$

19.5 = 19.5

Formula 2: $\mathbf{H}_{\mathsf{T}} + \mathbf{V}_{\mathsf{T}} \leq 40$ feet

 $26 \le 40$

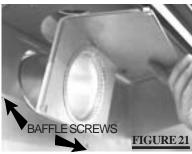
PRE-INSTALLATION PREPARATION

FAILURE TO INSTALL THE CAP WILL CAUSE THE FIREPLACE TO FUNCTION IMPROPERLY AND CAN CAUSE INJURY OR PROPERTY DAMAGE. SEE TOP EXIT PREPARATION FOR DETAILS. For optimum performance, it is recommended that all horizontal runs have a 1 inch rise per foot.

REAR EXIT:

Remove the baffle from the back of the firebox (Model GD36 only) by removing the four screws. **FIGURE 20.**





From inside the firebox, insert the 4" flue pipe assembly (provided) through the rear of the firebox. Secure the assembly to the rear and top of the unit using $4 \# 10-24 \times \frac{1}{2}$ inch screws supplied.

Do not overtighten. The gasket needs only to be snug against the firebox. **FIGURE 21.**

Before attaching elbows to the collars on the back of the fireplace, $1\frac{1}{2}$ " will need to be trimmed off the 4" collar.

MODEL GD36 ONLY: Re-attach the baffle to the back of the firebox using the four screws. **FIGURE 20.**

TOP EXIT:

Remove the baffle from the back of the firebox (Model GD36 only) by removing the four screws. **FIGURE 20.**



- **1.** Remove the 7 inch diameter cap from the top of the fireplace and re-secure it over the 7" collar located at the rear of the unit. Press firmly on the cap while securing to ensure an airtight seal. *Do not damage the gasket.*
- 2. Remove the plate covering the 4" diameter flue opening (seen inside the top of the 7" diameter collar) and discard. *Try not to disturb the retaining ring or the gasket beneath.* Re-secure the ring and gasket using the screws removed from the plate.
- **3.** From inside the firebox, insert the 4" flue pipe assembly through the heat shield and out through the retaining ring. Secure the assembly to the rear and top of the unit using 4 #10-24 x ½ inch screws supplied. *Do not overtighten.* The gasket needs only to be snug against the firebox. **FIGURE 22.**

MODEL GD36 ONLY: Re-attach the baffle to the back of the firebox using the four screws. **FIGURE 20.**

FOR SAFE AND PROPER OPERATION OF THE FIREPLACE,

INSTALLATION

WALL AND CEILING PROTECTION

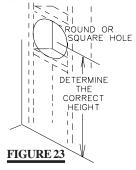
FOLLOW THE VENTING INSTRUCTIONS EXACTLY.

NOTE: <u>REAR EXIT</u> - A clearance to combustibles of 1" at the bottom of the vent and 2" at the top must be maintained during the first 12" of venting when penetrating combustible walls. The firestop spacer (W615-0044) supplied with the unit should be used to maintain this clearance. Thereafter a 1" clearance to combustibles may be maintained using firestop spacer (W500-0096).

<u>TOP EXIT</u> - Only a clearance to combustibles of 1" all around the vent pipe is required.

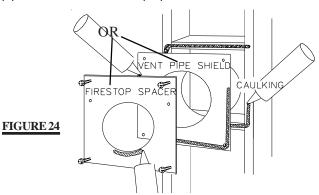
HORIZONTAL INSTALLATION

This application occurs when venting through an exterior wall. Having determined the air terminal location, cut and frame a hole in an exterior wall with a minimum opening as required. **See Note above.** (As an alternative to framing, a vent pipe shield may be installed, ensuring a 1" clearance to combustibles.)



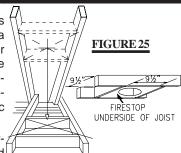
1. Mark and cut the vent pipe FIGURE 23 shield to the determined depth of

the combustible wall. Apply a bead of caulking (not supplied) to the framework or to the shield plate (in the case of a finished wall) and secure the shield through the opening to the interior wall. The final location of the vent pipe shield should maintain the required clearance to the 7" vent pipe / liner. (See note above). Do not fill this cavity with any type of material. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe / liner is installed in its final position, apply sealant between the pipe / liner and the firestop spacer.



VERTICAL INSTALLATION

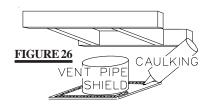
This application occurs when venting through a roof. Installation kits for various roof pitches are available from your Napoleon dealer. See Accessories to order the specific kit required.



1. Determine the air ter-

frame 9½ inch openings in the ceiling and the roof to provide the minimum 1 inch clearance between the fireplace pipe / liner and any combustible material. Try to center the exhaust pipe location midway between two joist to prevent having to cut them. Use a plumb bob to line up the center of the openings. DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL.

A vent pipe shield will prevent any materials such as insulation, from filling up the 1" air space around the pipe. Nail headers between the joist for extra support.



2. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. A firestop must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe / liner is installed in its final position, apply sealant between the pipe / liner and the firestop spacer.

NOTE: Two methods to ensure the air terminal covers the cut out in the wall are;

- 1. Where the opening in the outside wall has been cut 10½" tall to provide the 2" clearance from the vent pipe, terminal extension plate W500-0103 must be used to cover the opening.
- 2. The first 12" of vent pipe must have a 2" clearance to combustible material when the vent pipe exits off the back of the fireplace. This applies to any finishing material or insulation in the wall that the vent pipe passes through within that 12". The clearance from the top of the vent pipe to the combustible material on the outside surface of the wall only requires a 1" clearance from the vent pipe.

USING FLEXIBLE VENT COMPONENTS

Use only approved aluminum flexible liner kits marked:

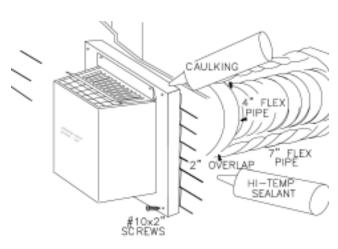


For safe and proper operation of the fireplace, follow the venting instructions exactly.

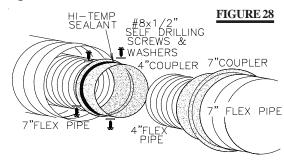
HORIZONTAL AIR TERMINAL INSTALLATION

- 1. Cut or frame a hole in an exterior wall with a minimum round or square opening of 10½ inches. Secure the firestop spacer over the opening to the interior wall.
- 2. Stretch the 4" diameter aluminum flexible liner to the required length taking into account the additional length needed for the finished wall surface. Slip the liner a minimum of 2" over the inner sleeve of the air terminal and secure with 3 #8 screws. Apply a heavy bead of the high temperature sealant.
- **3.** Using the 7" diameter flexible aluminum liner, slide over the outer combustion air sleeve of the air terminal and secure with 3 #8 screws. Seal as before.

FIGURE 27

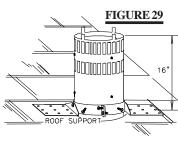


The air terminal mounting plate may be recessed into the exterior wall or siding by $1\frac{1}{2}$, the depth of the return flange.



- 4. Insert the liners through the firestop maintaining the required clearance to combustibles. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall and make weather tight by sealing with caulking (not supplied).
- **5.** Apply a heavy bead of the high temperature sealant to the inside of the 4" liner approximately 1" from the end. Slip the liner a minimum of 2" over the fireplace vent collar and secure with 3 #8 screws.
- **6.** Using the 7" diameter flexible aluminium liner, apply sealant, slide a minimum of 2" over the fireplace combustion air collar and secure with 3 #8 screws.
- 7. If more liner needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use noncombustible strapping to maintain the minimum 1" clearance to combustibles.

VERTICAL AIR TERMINAL INSTALLATION

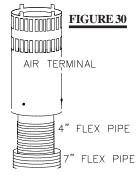


1. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.

2. Stretch the 4" diameter aluminium flexible liner to the required length. Slip the liner a minimum of 2" over the

inner sleeve of the air terminal and secure with 3 #8 screws. Seal using a heavy bead of the high temperature sealant.

- **3.** Repeat using 7" diameter aluminium flexible liner.
- 4. Thread the air terminal pipe assembly down through the roof. The air terminal must be located vertically and plumb. Attach the air terminal assembly to the roof support, ensuring that a mini-

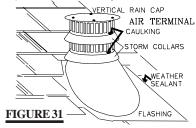


mum 16" of air terminal will penetrate the roof when fas-

DO NOT CLAMP THE FLEXIBLE ALUMINIUM LINER.

- 5. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal is properly centred within the flashing, giving a 3/4" margin all around. Fasten to the roof. Do **not** nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.
- **6.** Apply a heavy bead of weatherproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centred between the air intake and the air exhaust slots onto the air terminal. Tighten securely. Attach the vertical rain cap.

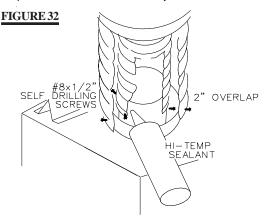
Spacers are attached to the 4" inner flex liner at predetermined intervals to maintain a 1-1/4" air gap to the 7" outer liner. These spacers must not be removed. FIGURE 31



7. If more liner needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use noncombustible strapping to maintain a clearance to combustibles of 1".

FIREPLACE VENT CONNECTION

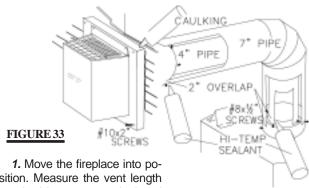
- 1. Install the 4 inch diameter aluminium flexible liner to the fireplace. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high temperature sealant provided.
- **2.** Install the 7 inch diameter aluminium flexible liner to the fireplace. Attach and seal the joints.



USING RIGID VENT COMPONENTS

The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Wolf Steel vent spacers **W615-0033** or equivalent every 3 feet and either side of each elbow to maintain the minimum 1½" clearance between the outer and inner vent pipes. Use Wolf Steel support ring assembly **W010-0370** or equivalent noncombustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs.

HORIZONTAL AIR TERMINAL INSTALLATION



- sition. Measure the vent length required between terminal and fireplace taking into account the
- additional length needed for the finished wall surface and any 11/4" overlaps between venting components.
- **2.** Apply high temperature sealant to the outer edge of the 4" inner collar of the fireplace. Attach the first vent component and secure using 3 self tapping screws. Repeat using 7" piping. W415-0210/E/06.25.03

3. Holding the air terminal (lettering in an upright, readable position), insert into both vent pipes with a twisting motion to ensure that both the terminal sleeves engage into the vent pipes and sealant. Secure the terminal to the exterior wall and make weather tight by sealing with caulking (not supplied).

The air terminal mounting plate may be recessed into the exterior wall or siding by 1½", the depth of the return flange.

EXTENDED HORIZONTAL AND CORNER AIR TERMINAL INSTALLATION

- 1. Follow the instructions for "Horizontal Air Terminal Installations", items 1 to 3.
- 2. Continue adding components alternating inner and outer venting. Ensure that all 4" venting and elbows have sufficient vent spacers attached and each component is securely fastened to the one prior. Attach the 4" telescopic

AIR TERMINAL

sleeve to the vent run.
Repeat using a 7" telescopic sleeve. Secure and seal as before. To facilitate completion, attach 4" and 7" couplers to the air terminal.

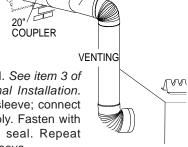


FIGURE 34

TELESCOPIC SLEEVE

3. Install the air terminal. See item 3 of the Horizontal Air Terminal Installation. Extend the 4" telescopic sleeve; connect to the air terminal assembly. Fasten with self tapping screws and seal. Repeat using the 7" telescopic sleeve.

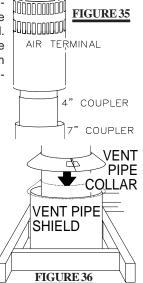
VERTICAL VENTING INSTALLATION

Before attaching elbows to the collars on the back of the fireplace, $1\frac{1}{2}$ will need to be trimmed off the 4" collar.

REAR VENT APPLICATION: Attach 4" and 7" elbows to the fireplace. Secure with 3 screws and seal the joints and screw heads using high temperature sealant. Proceed to step 1 below.

TOP VENT APPLICATION:

- 1. Move the fireplace into position.
- 2. Fasten the roof support to the roof using the screws provided. FIGURE 30. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.
- **3.** Apply high temperature sealant to the outer edge of the inner sleeve of the air terminal. Slip a 4" diameter coupler a minimum of 2" over the sleeve and secure using 3 screws.
- **4.** Apply high temperature sealant to the outer edge of the of the outside sleeve of the air terminal. Slip a 7" diameter coupler over the sleeve and secure as before. Trim the 7" coupler even with the 4" coupler end.
- 5. Thread the air terminal pipe assembly down through the roof support and attach, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened. If the attic space is tight, we recommend threading the Wolf Steel vent pipe collar or equivalent loosely onto the air terminal assembly as it is passed through the attic. The air terminal must be located vertically and plumb.



- 6. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof. Do NOT nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.
- **7.** Apply a heavy bead of waterproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centered between the air intake and air exhaust slots onto the air terminal. Tighten securely. Attach the rain cap.
- **8.** Continue adding rigid venting sections, sealing and securing as above. Attach a 4" collapsed telescopic pipe to the last section of rigid piping. Secure with screws and seal. Repeat using a 7" telescopic pipe.
- **9. REAR VENT APPLICATION:** Run a bead of high temperature sealant around the outside of the 4" elbow. Pull the adjustable pipe a minimum 2" onto the elbow. Secure with 3 screws. Repeat with the 7" telescopic pipe.

TOP VENT APPLICATION: Run a bead of high temperature sealant around the outside of the 4" collar on the fire-place. Pull the adjustable pipe a minimum of 2" onto the collar. Secure with 3 screws. Repeat with the 7" telescopic pipe.

10. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe.

RESTRICTING VERTICAL VENTS

Model GD36NTR Vertical Terminal only:

Vertical terminations running longer than 15 feet may display a very active flame. If this appearance is not desirable, the vent exit must be restricted using restrictor plate kit, RP-KT. This reduces the velocity of the exhaust gases, slowing down the flame pattern and creating a more traditional appearance. Specific instructions are included with the kit.

GAS INSTALLATION

Proceed once the vent installation is complete.

- 1. Move the fireplace into position and secure using the nailing tabs and/or secure to the floor through the ½"ø holes located at either end of the base.
- 2. Route a 3/8" N.P.T. black iron gas line, 1/2" type-L copper tubing or equivalent to the fireplace.
- **3.** For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route 2-strand (solid core) millivolt wire through the electrical hole located at the bottom left side of the unit. The recommended maximum lead length depends on wire

size: WIRE SIZE MAX. LENGTH
14 gauge 100 feet
16 gauge 60 feet
18 gauge 40 feet

Attach the two leads to terminals 1 and 3 located on the gas valve.

FIGURE 37





The gas line and the shutoff valve (if so equipped) must not interfere with the opening and closing of the door latch.

Seal and tighten securely. An adapter fitting is required between the gas valve and the copper tubing or flex connector.

Do not kink flex connector.

Check for gas leaks by brushing on a soap and water solution.

Do not use open flame.

Do not connect either the wall switch, thermostat or gas valve to electricity (110 volts).

Purge all gas lines with the glass door of the fireplace open. Assure that a continuous gas flow is at the burner before closing the door.

MOBILE HOME INSTALLATION

In Canada, mobile home installation may be vented horizontally or vertically. In the United States, it may only be installed vertically. See "Vertical Venting" or "Horizontal Air Terminal Installation" for installation.

The fireplace is equipped with two 1/4" diameter holes located in the front left and right corners of the base. For mobile home installations, the fireplace must be fastened in place. Use #10 hex head screws, inserted through the holes in the base to secure. It is recommended that the fireplace be secured in all installations.

Always turn off the pilot and the fuel supply at the source, prior to moving the mobile home.

After moving the mobile home and prior to lighting the fireplace, ensure that the logs are positioned correctly.

FRAMING

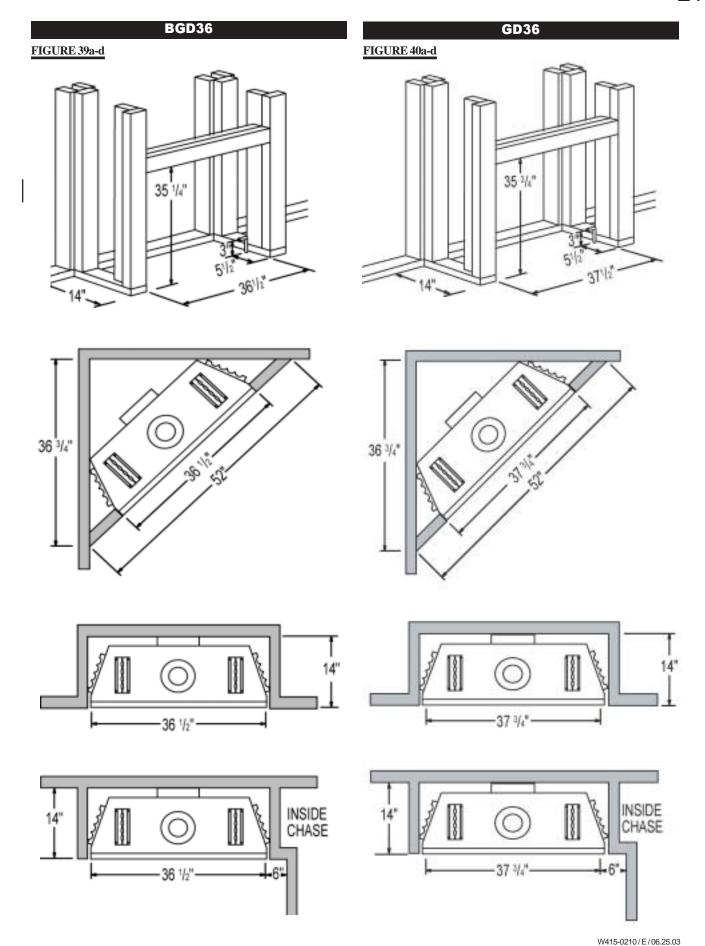
It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2x4's and frame to local building codes.

It is not necessary to install a hearth extension with this fireplace system. Objects placed in front of the fireplace should be kept a minimum of 48" away from the front face.

When roughing in the fireplace, raise the fireplace to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting, hard wood, which if not planned for will interfere with the opening of the lower access door and the installation of many decorative flashing accessories.

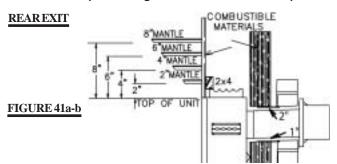
Note: In order to avoid the possibility of exposed insulation or vapour barrier coming in contact with the fireplace body, it is recommended that the walls of the fireplace enclosure be "finished" (ie: drywall/sheetrock), as you would finish any other outside wall of a home. This will ensure that clearance to combustibles is maintained within the cavity.

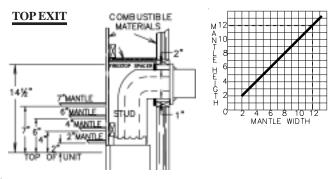
Combustible materials may be installed flush with the front of the fireplace but must not cover any of the black faceareas of the fireplace. Non-combustible material (brick, stone or ceramic tile) may protrude in these areas.



MANTLE CLEARANCES

Combustible mantle clearance can vary according to the mantle depth. Use the graph to help evaluate the clearance needed. Curtains, above the fireplace, must not be positioned lower than the 2" distance required for the 2" combustible mantle. These same requirements apply to any combustibles protruding on either side of the fireplace.





BGD36 NAILING TAB INSTALLATION

FIGURE 42

NAILING TAB

1) Attach the nailing tabs to the corner posts using the 2 sheet metal screws supplied. Secure through the centre of the top and bottom slots in the nailing tab and then through the existing holes in the corner posts.

If there are no existing holes, follow these instructions:

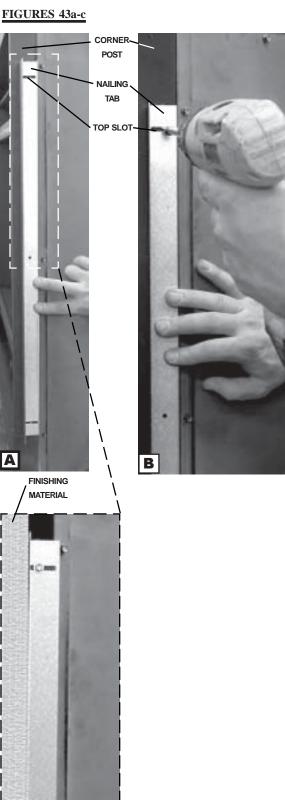
Position the nailing tab so that the front face is offset with the front edge of the corner post (approx. ½"). Centre the nailing tab vertically on the corner post.

Figure 43 a.

Drill through the centre of the top and bottom slots in the nailing tab. Secure using the two sheet metal screws supplied. This allows the nailing tab to slide back and forth for desired framing. Figure 43 b.

2) To determine the final location of the nailing tab you must first determine the thickness of your finishing material (i.e. drywall). This will determine the dimension from the front edge of the corner post to the nailing tab. Once the nailing tab is in the desired location, drill through the centre hole of the nailing tab. Secure with a sheet metal screw*. Figure 43 c.

* Additional set screws may be installed.

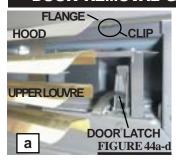


CENTRE

HOLE

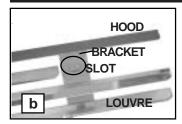
FINISHING

DOOR REMOVAL & INSTALLATION

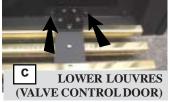


DOOR OPENING AND CLOSING: The upper louvres must be removed to allow the door to be opened or closed. To access the lower door latch, open the valve control door. Release the top and bottom door latches, located at the right side of the door.

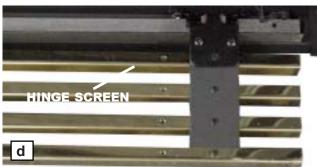
GVFL LOUVRE INSTALLATION



TO INSTALL THE UPPER LOUVRES: Insert the upper louvres into the slots on both brackets. Press the top flange of the hood into the four clips located along the top of the unit as shown.



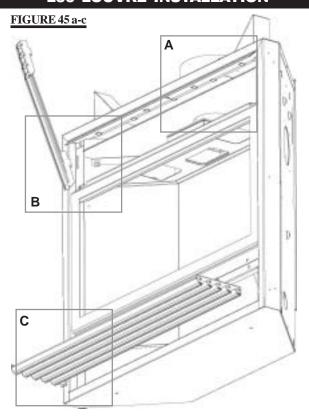
TO INSTALL THE LOWER LOUVRE ASSEMBLY: Attach each hinge to the firebox with 2 screws.

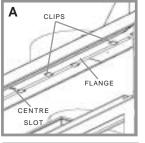


Position the hinge screen into place and with the control door open, secure to the firebox using three screws.

Optional plated door trim, and arched door facia are available at your local Napoleon dealer.

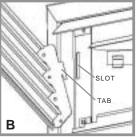
L36 LOUVRE INSTALLATION





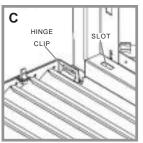
HOOD

Attach the hood by pressing the top flange into the clips along the top of the louvre opening. Secure using a screw through the centre slot.



UPPER LOUVRES

Insert the louvre tabs into the slots located at the top left and right corners of the unit.



LOWER LOUVRES

Insert the hinge clips into the slots located at the bottom left and right corners of the unit.

To remove the louvres, pull the back tabs of the clips forward, while pushing the louvre assembly back. Lift the clip.

LOG PLACEMENT

PHAZER™ logs and glowing embers exclusive to Napoleon Fireplaces, provide a unique and realistic glowing effect that is different in every installation. Take the time to carefully position the glowing embers for a maximum glowing effect. Log colours may vary. During the initial use of the fireplace, the colours will become more uniform as colour pigments burn in during the heat activated curing process.

FIGURE 46a-d



1. Place the back log (#1) onto the log support tray and in front of the tabs. The tabs maintain an air space between the log and firebox back to facilitate combustion air flow. Ensure that the back of the log rests against the brackets on the back wall of the firebox.



2. Move the two small logs (#2 & #3) into position, lining up the studs located on the burner with the holes on the bottom of the logs. Ensure that the small logs sit flat on the burner.



3. Place the bottom of the left crossover log (#4) against the left firebox side and pulled forward to the grate. The top of the log should rest in the pocket on the back log.



4. Position the notch located on the end of the center log (#5) against the middle grate post with the other end of the log resting in the pocket of the left crossover log.



5. Place the bottom of the right crossover log (#6) against the right firebox side and pulled forward to the grate. The top of the log should rest in the pocket provided on the center log (#5).

CHARCOAL EMBERS

Randomly place the charcoal embers along the front and sides of the log support tray in a realistic manner. *Fine dust found in the bottom of the bag should not be used.*

VERMICULITE (MODEL GD36 ONLY)

Sprinkle vermiculite around the charcoal embers.

Note: Both charcoal embers and vermiculite are not to be placed on the burner.

GLOWING EMBERS

Tear the embers into pieces and place along the front row of ports covering all of the burner area in front of the small logs (#2 & #3). Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow. The ember material will only glow when exposed to direct flame; however, care should be taken to not block the burner ports.

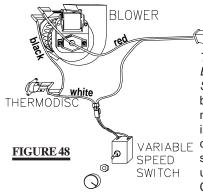
Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. **PHAZER**TM logs glow when exposed to direct flame. Use only certified "glowing embers" and **PHAZER**TM logs available from your Napoleon dealer.

LOGO PLACEMENT

Remove the backing of the logo supplied and place on the glass viewing door, as indicated.



OPTIONAL BLOWER INSTALLATION

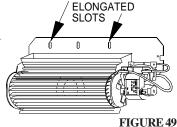


INSTALLATION TO BE DONE
BY A QUALIFIED INSTALLER and must
be electrically connected and grounded
in accordance with local codes. In the absence of local codes,
use the current CSA
C22.1 CANADIAN ELEC-

TRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States

If the fireplace was not previously equipped with a blower: route a grounded 2-wire, 60hz power cable to the receptacle / junction box. At this point, it must be strain relieved and insulated.

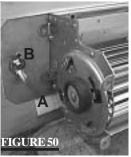
The three slots on the blower mounting bracket allow ease of adjustment when attaching the blower. For a quiet running blower, do not allow the assembly to sit on the firebox base.



Slide the vibration reducing pad (A) into the clip (C) and up against the threaded stud (B) at the other end. The blower must be able to be positioned entirely onto the pad.

To ease installation of the blower, remove the hinge screen and valve control door (lower louvres) from the base of the fireplace.

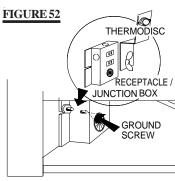
Tilt the blower onto its side. Slide it past the controls and into the clip **(C)**. Secure to the threaded stud using the lock washer and wing nut provided. Ensure that the blower does not touch the fireplace base or the firebox.



Attach the connectors from the black and white wires to the thermodisc and secure the thermodisc bracket to the securing stud at the bottom left of the unit using a lock washer and wing nut. Ensure that the thermodisc touches the firebox wall.

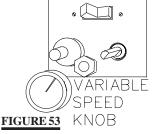
Attach the connectors from the black and red wires to the blower.





Attach and secure the variable speed switch using the nut provided. Plug the harness cord into the receptacle.

The wire harness provided in this kit is a universal harness. When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.

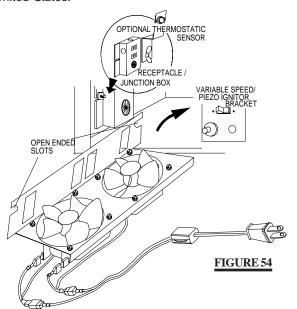


Because the blower is thermally activated, when turned on, it will automatically start approximately 10 minutes after lighting the fireplace and will run for approximately 30-45 minutes after the fireplace has been turned off. Use of the fan increases the output of heat.

Drywall dust will penetrate into the blower bearings, causing irreparable damage. Care must be taken to prevent drywall dust from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

OPTIONAL FAN INSTALLATION

ELECTRICAL INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and must be connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 Canadian Electrical code in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.



To safely install the fan. turn off the electricity first.

If the fireplace was not previously equipped with a fan: route a grounded 2-wire, 60hz power cable to the junction

box. At this point, it must be strain relieved and insulated.

The wire harness provided in this kit is a universal harness. When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.



FIGURE 55

To ease installation of the fan,

remove the hinge screen and valve control door (lower louvres) from the base of the fireplace.

Position the vibration reducing pad into the clip and onto the threaded stud at the other end, piercing a hole into the pad. The fan assembly must be able to be positioned entirely onto the pad.

Slide the fan assembly past the controls and into the clip. Secure using the lock washer and nut provided.

Plug the harness cord into the receptacle.

GD36 THERMOSTATIC SENSOR CONTROL

This optional kit is meant to be used only in conjunction with the GD65 Fan Kit, shown above, which may be ordered from your Wolf Steel / Napoleon dealer.

With the thermostatic sensor option, the fan, when turned on, becomes thermally activated, and will automatically run approximately 15-30 minutes after the fireplace has been lit and for approximately 30-45 minutes after the fireplace has been turned off.

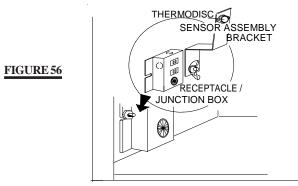
Use of the fan increases the output of heat.

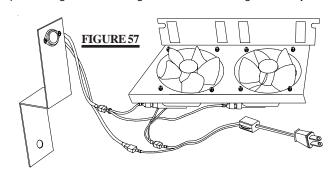
Unplug the power cord from the receptacle. Connect all wires as shown.

Attach and secure the sensor assembly bracket to the securing stud located next to the receptacle/junction box at the bottom left of the unit using the lock washer and wing nut. Ensure that the thermodisc touches the firebox wall.

Plug the power cord back into the receptacle.

When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.





OPERATION / MAINTENANCE

Purge all gas lines with the glass door of the fireplace removed. Assure that a continuous gas flow is at the burner before installing the door.

When lit for the first time, the fireplace will emit a slight odour for a few hours. This is a normal temporary condition caused by the curing of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process and will not occur again. After extended periods of non-operation such as following a vacation or a warm weather season, the fireplace may emit a slight odour for a few hours. This is caused by dust particles in the heat exchanger burning off. In both cases, open a window to sufficiently ventilate the room.

FOR YOUR SAFETY READ BEFORE LIGHTING:

- **A.** This fireplace is equipped with a pilot which must be lit by hand while following these instructions exactly.
- **B.** Before operating smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
- **C.** Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and replace any part of the control system and any gas control which has been under water.

WHAT TO DO IF YOU SMELL GAS:

- · Turn off all gas to the fireplace.
- · Open windows.
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

GAS KNOI

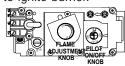
LIGHTING INSTRUCTIONS

WARNING: The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.

When lighting and re-lighting, the gas knob cannot be turned from pilot to off unless the knob is **depressed slightly.**

- 1. Stop! Read the above safety information on this label.
- 2. Turn off all electric power to the fireplace.
- 3. Turn the gas knob clockwise to off.
- **4.** Wait five (5) minutes to clear out any gas. If you smell gas including near the floor. Stop! Follow "B" in the above safety information on this label. If you don't smell gas go the next step.

- **5.** Turn gas knob counter-clockwise to pilot.
- **6.** Depress slightly and hold gas knob while lighting the pilot with the push button ignitor. Keep knob depressed for one minute, then release. If pilot does not continue to burn, repeat steps 3 through 5.
- With pilot lit, depress and turn gas knob counter-clockwise to on.
- **8.** If equipped with remote on-off switch/thermostat, main burner may not come on when you turn valve to on. Remote switch must be in the on position to ignite burner.
- **9.** Turn on all electric power to the fireplace.



TO TURN OFF GAS

- **1.** Turn off all electric power to the fireplace if service is to be performed.
- 2. Push in gas control knob slightly and turn clockwise to off. Do not force.

TURN THE CONTROL VALVE TO THE OFF POSITION WHEN HEATER IS NOT IN USE.

MAINTENANCE

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THE FIREPLACE.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This fireplace and its venting system should be inspected before use and at least annually by a qualified service person. The fireplace area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids. The flow of combustion and ventilation air must not be obstructed.

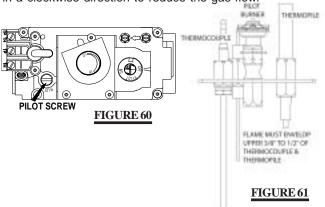
- 1. In order to properly clean the burner and pilot assembly, remove the logs to expose both assemblies.
- **2.** Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, at least once a year.

- **3.** Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
- **4.** Check to see that the pilot flame is large enough to engulf the thermocouple and thermopile and reaches toward the burner with the third jet.
- 5. Replace the cleaned logs.
- **6.** Check to see that the main burner ignites completely on all openings when the gas knob for the burner is turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer / distributor.
- 7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.

ADJUSTMENTS

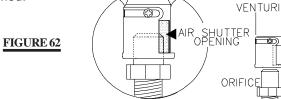
PILOT BURNER ADJUSTMENT

Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow.



These settings are for rear vented (maximum) horizontal termination. Adjustment may be required depending on fuel type, vent configuration and altitude.

Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.

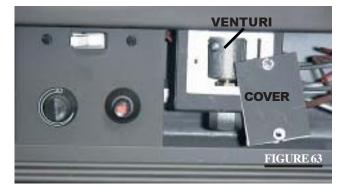


Air shutter adjustment must only be done by a qualified installer!

VENTURI ADJUSTMENT

Both fireplace models have air shutters that have been factory set open according to the chart below:

	MODEL GD36	MODEL BGD36
NG	1/16"	^{1/} 16"
LP	3/8"	3/8"



To access the air shutter, remove the two screws that secure the cover to the air housing, taking care not to damage the gasket.

MODEL GD36 ONLY: Remove the three screws that secure the control panel in order to access the air housing.

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor.

* WARNING: This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

When ordering replacement parts always give the following information:

- 1. Model & Serial Number of Fireplace
- 2. Installation date of fireplace
- 3. Part Number
- 4. DESCRIPTION OF PART
- 5. FINISH
- 6. Top or rear vent

COMPONENTS COMMON TO BOTH UNITS:

#	PART NO.	DESCRIPTION
1	W225-0058	BLACK DOOR FRAME
2	W357-0001	PIEZO IGNITER
3	W680-0004	THERMOPILE
4	*W680-0005	THERMOCOUPLE
5		NATURAL GAS PILOT ASSEMBLY
5	W010-0801	PROPANE GAS PILOT ASSEMBLY
6	W573-0008	HIGH TEMPERATURE SEALANT
7	W455-0069	NATURAL GAS PILOT INJECTOR
7	W455-0067	PROPANE GAS PILOT INJECTOR
8	W725-0025	NATURAL GAS VALVE
8	W725-0026	PROPANE GAS VALVE
9		NAPOLEON LOGO
10	GD660	STANDARD WALL SWITCH & 20FT OF WIRE
		FLUE CAP c/w GASKET
12	W010-0539	FLUE PIPE ASSEMBLY c/w GASKET
	W010-0764	PAN BURNER
14	GL-639	LOG SET
	W361-0016	
	W550-0001	
	W135-0183	BACK LOG (#1)
	W135-0184	LEFT MIDDLE LOG (#2)
	W135-0185	RIGHT MIDDLE LOG (#3)
	W135-0186	LEFT CROSSOVER LOG (#4)
	W135-0187	MIDDLE CROSSOVER LOG (#5)
	W135-0188	` '
	W010-0454	
24	W010-0516	BLACK DOOR C/W GLASS
25	W615-0044	FIRESTOP SPACER
		GD36 COMPONENTS

26	W455-0040	#41 NATURAL GAS ORIFICE
26	W455-0003	#54 PROPANE GAS ORIFICE
27	W361-014	VERMICHITE

BGD36 COMPONENTS

26	W455-0048	#47	NATURAL GAS ORIFICE
26	W455-0047	#56	PROPANE GAS ORIFICE

FLEXIBLE VENT KITS

GD220 (5 FT)

28	W010-0397	4" FLEXIBLE ALUMINIUM LINER - (5 FT) C/W SPACERS
28	W410-0017	7" FLEXIBLE ALUMINIUM LINER - (5 FT)

GD330 (10 FT)

28	W410-0018	7" FLEXIBLE ALUMINIUM LINER -(10 FT)
28	W010-0300	4" FLEXIBLE ALUMINIUM LINER -(10 FT) c/w spacers
29	W010-0370	WALL SUPPORT ASSEMBLY

TERMINAL KITS

30 PERISCOPE **GD201 WALL TERMINAL KIT GD222** 31

ROOF TERMINAL KITS

32	1/12 TO 7/12 PITCH	- GD110	
33	8/12 TO 12/12 PITCH	- GD111	
34	FLAT ROOF	- GD112	
35	W010-0569	AIR TERMINAL	
36	W120-0036	VERTICAL CAP	
37	W170-0063	STORM COLLAR	
38	W010-0567	ROOF SUPPORT	
39	W263-0054 / W263-0055 / W263-0056	ROOF FLASHING	

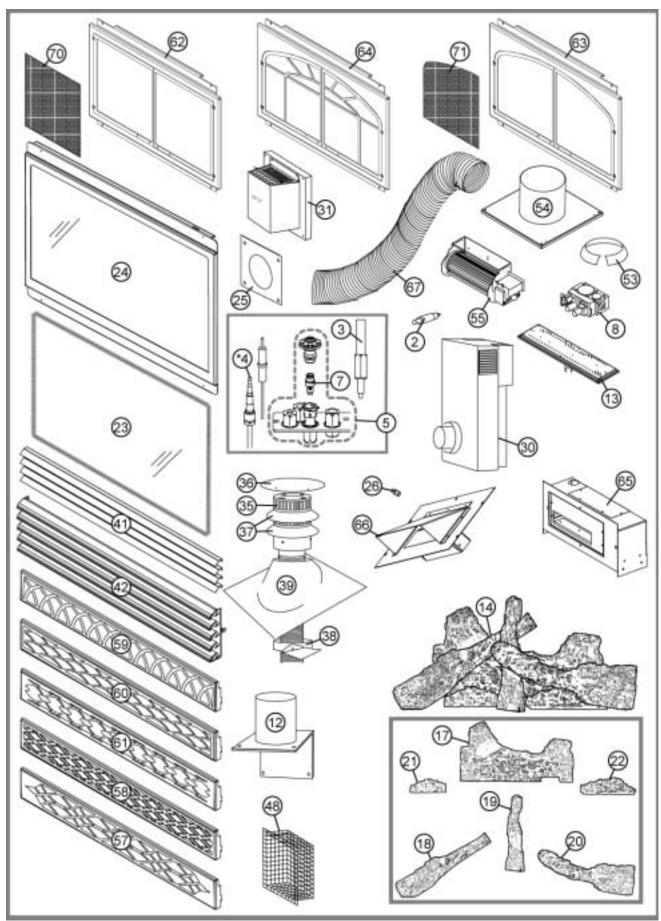
ACCESSORIES:

40	W175-0001	4" COUPLER
40	W175-0013	7" COUPLER
41	GVFLK	LOUVRE KIT - UPPER & LOWER - BLACK
41	GVFLAB	LOUVRE KIT - UPPER & LOWER - ANTIQUE BRASS
41	GVFLPB	LOUVRE KIT - UPPER & LOWER - POLISHED BRASS
41	GVFLSS	LOUVRE KIT - upper & lower - brushed stainless steel
42	L36K	LOUVRE KIT - upper & Lower - BLACK
43	W573-0008	HI-TEMPERATURE SEALANT
44	W690-0001	MILLIVOLT THERMOSTAT
45	W660-0011	REMOTE CONTROL - ADVANTAGE PLUS
46	W500-0096	FIRESTOP SPACER - FLEXIBLE VENTING
46	W500-0136	FIRE STOP SPACER - RIGID VENTING
47	W500-0103	TERMINAL EXTENSION PLATE
48	GD-301	HEAT GUARD
49	W10-0370	WALL SUPPORT ASSEMBLY
50	W660-0013	MODULATING REMOTE
51	W175-0053	DURA-VENT ZERO CLEARANCE ADAPTOR
52	W361-0016	GLOWING EMBERS
53	W585-0071	VENT PIPE COLLAR
54	W585-0072	VENT PIPE SHIELD
55	GZ550-1KT	BLOWER KIT
56	GD36	THERMOSTATIC SENSOR CONTROL KIT FOR USE WITH GD65 ONLY
57	HOIK-2	HERITAGE ORNAMENTAL INSETS - BLACK
57	HOIG-2	HERITAGE ORNAMENTAL INSETS - GOLD PLATED
57	HOIKG-2	HERITAGE ORNAMENTAL INSETS - BLACK GOLD PLATED
57	HOIBC-2	HERITAGE ORNAMENTAL INSETS - BRUSHED COPPER PLATED
57	HOIBG-2	HERITAGE ORNAMENTAL INSETS - BRUSHED GOLD PLATED
58	DOIK-1	DIAMOND ORNAMENTAL INSETS - BLACK
58	DOIG-1	DIAMOND ORNAMENTAL INSETS - GOLD PLATED
58	DOIKG-1	DIAMOND ORNAMENTAL INSETS- BLACK GOLD PLATED
58	DOIBC-1	DIAMOND ORNAMENTAL INSETS- BRUSHED COPPER PLATED
58	DOIBG-1	DIAMOND ORNAMENTAL INSETS- BRUSHED GOLD PLATED
59	GOIK-1	GOTHIC ORNAMENTAL INSETS - BLACK
59	GOIG-1	GOTHIC ORNAMENTAL INSETS - GOLD PLATED
59	GOIKG-1	GOTHIC ORNAMENTAL INSETS - BLACK GOLD PLATED
59	GOIBC-1	GOTHIC ORNAMENTAL INSETS - BRUSHED COPPER PLATED
59	GOIBG-1	GOTHIC ORNAMENTAL INSETS - BRUSHED GOLD PLATED
60	SOIK-1	SEASHELL ORNAMENTAL INSETS - BLACK
60 60	SOIG-1	SEASHELL ORNAMENTAL INSETS - GOLD PLATED SEASHELL ORNAMENTAL INSETS - BLACK GOLD PLATED
60	SOIKG-1 SOIBC-1	SEASHELL ORNAMENTAL INSETS - BLACK GOLD PLATED SEASHELL ORNAMENTAL INSETS - BRUSHED COPPER PLATED
60	SOIBG-1	SEASHELL ORNAMENTAL INSETS - BRUSHED COPPER PLATED SEASHELL ORNAMENTAL INSETS - BRUSHED GOLD PLATED
61	EOIK-1	ECLIPSE ORNAMENTAL INSETS - BROSHED GOLD PLATED
61	EOIG-1	ECLIPSE ORNAMENTAL INSETS - GOLD PLATED
61	EOIKG-1	ECLIPSE ORNAMENTAL INSETS - BLACK GOLD PLATED
61	EOIBC-1	ECLIPSE ORNAMENTAL INSETS - BRUSHED COPPER PLATED
61	EOIBG-1	ECLIPSE ORNAMENTAL INSETS - BRUSHED GOLD PLATED
62	DK36-R	DOOR KIT, RECTANGULAR - BLACK
62	DK36-RG	DOOR KIT, RECTANGULAR - GOLD PLATED
63	DK36-A	DOOR KIT, ARCHED - BLACK
63	DK36-AG	DOOR KIT, ARCHED - GOLD PLATED
64	DK36-W	DOOR KIT, WEBBED - BLACK
64	DK36-WG	DOOR KIT, WEBBED - GOLD PLATED
65	GA-566	HOT AIR KIT
66	GA-72	HOT AIR EXHAUST KIT
67	GA-70	EXTENSION KIT 5FT
		GD36 ACCESSORIES
		DESTRUCTOR DI ATE IZIT
CO	DD VT	

00	KP-NI	RESTRICTOR PLATE KIT
69	W175-0158	CONVERSION KIT - NG TO LP
69	W175-0163	CONVERSION KIT - LP TO NG
70	SK36-R	SCREEN KIT (RECTANGULAR)
71	SK36-A	SCREEN KIT (ARCHED)

BGD36 ACCESSORIES

69	W175-0159	CONVERSION KIT - NG TO LP	
69	W175-0164	CONVERSION KIT - LP TO NG	W415-0210/E/06.25.03
27	W361-0014	VERMICULITE	***************************************



TROUBLE SHOOTING GUIDE

Before attempting to troubleshoot, purge your unit and initially light the pilot and the main burner with the glass door removed.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner goes out; pilot stays on.	Pilot flame is not large enough or not engulfing the thermopile	turn up pilot flame.replace pilot assembly.
	Thermopile shorting	- clean thermopile connection to the valve. Reconnect replace thermopile / valve.
	Remote wall switch wire is too long; too much resistance in the system.	- shorten wire to correct length or wire gauge.
	Faulty thermostat or switch.	- replace.
Main burner goes	Refer to "MAIN BURNER GO	ES OUT; PILOT STAYS ON"
out; pilot goes out.	Vent is blocked	- check for vent blockage.
	Vent is re-circulating	- check joint seals and installation.
	4" flexible vent has become	- re-attach to fireplace.
	disconnected from fireplace.	- 7"ø cap was not replaced
Pilot goes out when the gas knob is re- leased.	System is not correctly purged.	- purge the gas line.
The gas valve has	Out of propane gas.	- fill the tank.
an interlock device which will not allow	Pilot flame is not large enough	- turn up the pilot flame.
the pilot burner to be lit until the ther-		- gently twist the pilot head to improve the flame pattern around t thermocouple.
mocouple has cooled. Allow ap-		- loosen and tighten thermocouple.
proximately 60	faulty.	clean thermocouple and valve connection.replace thermocouple.
seconds for the thermocouple to		- replace valve.
cool.	Faulty valve.	- replace.
Pilot burning; no gas to main	Themostat or switch is defective.	- connect a jumper wire across the wall switch terminals; if ma burner lights, replace switch / thermostat.
burner; gas knob is on 'HI'; wall switch / thermostat	Wall switch wiring is defective.	- disconnect the switch wires & connect a jumper wire across term nals 1 & 3; if the main burner lights, check the wires for defects at / or replace wires.
is on.	Main burner orifice is plugged.	- remove stoppage in orifice.
	Faulty valve.	- replace.
Pilot will not light.	No spark at pilot burner	 check if pilot can be lit by a match check that the wire is connected to the push button ignitor. check if the push button ignitor needs tightening. replace the wire if the wire insulation is broken or frayed. replace the electrode if the ceramic insulator is cracked or broken replace the push button ignitor.
TTH (T)	Out of propane gas	- fill the tank.
	Spark gap is incorrect	- spark gap should be 0.150" to 0.175" (5/32" to 11/64" approx.) fro the electrode tip and the pilot burner. To ensure proper electrod location, tighten securing nut (finger tight plus 1/4 turn).
1111 10	No gas at the pilot burner	- check that the manual valve is turned on check the pilot orifice for blockage.
		- replace the valve.
		- call the gas distributor.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot goes out while standing; Main burner is in 'OFF' position.	Gas piping is undersized.	 turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor appliance supply working pressure. check if supply piping size is to code. Correct all undersized piping.
Flames are consistently too large or too small. Carboning occurs.	Unit is over-fired or underfired.	- check in supply piping size is to code. Correct all undersized piping. - check pressure readings: Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Check that main burner is operating on "HI". Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5" water column for natural gas or 10" water column for propane. Check that main burner is operating on "HI". AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVERTORQUE. Leak test with a soap and water solution.
Flames are very aggressive.	Door is ajar	- tighten screws holding door in place
	MODEL GD36 ONLY: Aggressive venting action due to vent height.	 Restrict vent exit. See "RESTICTING VERTICAL VENTS". VENT HEIGHT MORE THAN 15 FEET: restrict vent exit using restrictor plate kit RP-KT
Main burner flame is a blue, lazy,	Blockage in vent.	- remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.
transparent flame.	Incorrect installation.	- refer to Figure 23 to ensure correct location of storm collars.
Carbon is being deposited on	Air shutter has become blocked	- ensure air shutter opening is free of lint or other obstructions.
glass, logs or combustion chamber surfaces.	Flame is impinging on the logs or combustion chamber.	 check that the logs are correctly positioned. open air shutter to increase the primary air. check the input rate: check the manifold pressure and orifice size as specified by the rating plate values. check that the door gasketing is not broken or missing and that the seal is tight. check that both 4" and 7" vent liners are free of holes and well sealed at all joints. check that minimum rise per foor has been adhered to for any horizontal venting.
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber sur-	- clean the glass with a recommended gas fireplace glass cleaner. DO NOT CLEAN GLASS WHEN HOT. If deposits are not cleaned off regularly, the glass may become
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	- ensure exhaust bracket gasket seal - check door seal and relief flap seal check for chimney blockage - check that chimney is installed to building code room is in negative pressure; increase fresh air supply check 7"ø cap gasket on the flue pipe assembly.
switch is in "OFF" position; main burner comes on	Wall switch is mounted upside down Remote wall switch is grounding.	
when gas knob is turned to "ON" position.		- check for ground (short); repair ground or replace wire.
W415-0210/E/06.25.03	Faulty valve.	- replace.